## CHALLENGE 1: READ THE FOLLOWING ARTICLE:

Even though the Internet is still a young technology, it's hard to imagine life without it now. Every year, engineers create more devices to integrate with the Internet. This network of networks criss-crosses the globe and even extends into space. But what makes it work?

To understand the Internet, it helps to look at it as a system with two main components. The first of those components is **hardware**. That includes everything from the cables that carry terabits of information every second to the computer sitting in front of you.

Other types of hardware that supports the Internet include [routers](http://communication.howstuffworks.com/convergence/router.htm), [servers](http://computer.howstuffworks.com/web-server.htm), cell phone towers, satellites, radios, [smartphones](http://communication.howstuffworks.com/smartphone.htm) and other devices. All these devices together create the network of networks. The Internet is a malleable system -- it changes in little ways as elements join and leave networks around the world. Some of those elements may stay fairly static and make up the backbone of the Internet. Others are more peripheral.

These elements are connections. Some are end points -- the computer, Smartphone or other device you're using to read this may count as one. We call those end points **clients**. Machines that store the information we seek on the Internet are **servers**. Other elements are **nodes** which serve as a connecting point along a route of traffic. And then there are the transmission lines which can be physical, as in the case of cables and fiber optics, or they can be useless signals from satellites, cell phone or 4G towers, or radios.

All of this hardware wouldn't create a network without the second component of the Internet: the protocols. **Protocols** are sets of rules that machines follow to complete tasks. Without a common set of protocols that all machines connected to the Internet must follow, communication between devices couldn't happen. The various machines would be unable to understand one another or even send information in a meaningful way. The protocols provide both the method and a common language for machines to use to transmit data.

*The Tech Terms Computer Dictionary*. Web. 07 Dec. 2010. <http://www.techterms.com/>.

## IN YOUR OWN WORDS ANSWER THE FOLLOWING:

* How does the internet work?

## ****CHALLENGE 2: Read the following information:****

"Cyber bullying" is when a child, preteen or teen is tormented, threatened, harassed, humiliated, embarrassed or otherwise targeted by another child, preteen or teen using the Internet, interactive and digital technologies or mobile phones. It has to have a minor on both sides, or at least have been instigated by a minor against another minor.

## IN YOUR OWN WORDS ANSWER THE FOLLOWING:

* How can we prevent cyber bulling?
* What should I do if I am a victim of cyber bulling?
* What should I do if I am a witness of cyber bulling?

## ****CHALLENGE 3: Highlight what you think is the correct answer****

**1. Which one is not an output device?**

Printer  
Monitor  
Keyboard  
Modem

**2. Which one works as an output and input device?**

Modem  
Scanner  
Mouse  
Monitor

**3. All computers must have:**

Word processing software  
An operating system  
A printer attached  
A virus checking program

**4. The brain of the computer is called:**

Random Access Memory or RAM  
Central Processing Unit or CPU  
Read Only Memory or ROM  
BIOS

**5. An operating system is:**

Integrated software  
CD-ROM software  
Application software  
System software

**6. Software is:**

A computer program  
A set of instructions  
All of the above  
only in operating systems

**7. One MB is equal to:**

The amount of RAM in every computer  
1 billion bytes  
1024KB  
1 thousand bytes

**8. The resolution of a printer is measured in:**

Megabits  
Hz  
Dots per inch (DPI)  
Inches (diagonal)

**9. Windows and Macintosh computers:**

Are both manufactured by Motorola  
Both use Intel microprocessors  
Use the same operating system  
Are not compatible

**10. A computer port is used to:**

Communicate with other computer peripherals  
Download files from the web  
Communicate with all hard drives  
Connect computers together

Quiz Level 2

**1. Which computer is the fastest?**

PII 600MHz  
PIII 600MHz  
Pentium 600MHz  
486 Turbo

**2. Which hard disk will be able to store more information?**

24MB  
2400KB  
24Gig  
240MB

**3.  In order for your computer to play music you need:**

A network card and speakers  
A sound card and speakers  
Nothing more than the internal speaker  
A CD-ROM drive

**4. In order to access the World Wide Web you need:**

An Internet connection, an Internet Service Provider and browser software  
Only Internet Explorer or Netscape Navigator  
A modem and a browser  
Nothing. All computers can access the Internet

**5. If you have two different printers attached to your computer:**

It is not possible to have two printers attached to a single computer  
You need to install a single printer driver  
You need to use application software that can recognize both printers  
You need to install two different printer drivers in order to be able to print to either printer

**6.  Which file extensions indicate only graphics files?**

BMP and DOC  
JPEG and TXT  
TXT and STK  
BMP and GIF

**7. Which Windows program do you use to manage folders and files?**

Windows Explorer  
Windows Accessories  
Microsoft Office  
Windows Control Panel

**8. What is a URL:**

An email address  
The title of a web site  
The address of a page on the World Wide Web  
A communication method between computers and printers

**9. Which media holds more information?**

Floppy diskette  
DVD  
CD-ROM  
Zip drive

**10. Which one is an email address:**

http://vianet.com/index.htm  
D:\\Email\Standard  
joesmart@billme.com  
Chaminade.org/teachers/mail addresses

## ****CHALLENGE 3:**** Connect the term of the left of the table with its definition in the right.

|  |  |
| --- | --- |
| TERM | DEFINITION |
| 1. Freeware | ( ) Is the brain of a computer |
| 2. Hardware | ( ) Is what allocates memory, processes tasks, accesses disks and peripherals, and serves as the user interface |
| 3. Byte | ( ) Is the smallest unit of computer data |
| 4.Central Processing Unit | ( ) It represent a single character in the computer's memory |
| 5. Compact Flash | ( ) Software programs designed to damage or do other unwanted actions on a computer system. |
| 6. Malware | ( ) Is software you can download, pass around, and distribute without any initial payment. |
| 7.Operating system | ( ) Is an optical disc format such as CD and DVD. It was developed for recording and playing back high-definition (HD) video and for storing large amounts of data. |
| 8. Software | ( )It is a type of flash memory most commonly used for storing pictures in digital cameras, but are also used in devices such as PDAs and portable music players |
| 9. Bit | ( ) refers to the physical parts of a computer and related devices. |
| 10. Blu-ray | ( ) Applications, scripts, and instruction sets |

## ****CHALLENGE 4: Find the words****

COMMUNICATE, COMPUTER, DIGITAL, DISK, DOWNLOAD, ELECTRONIC,

FLOPPY, FORMAT, HARDDRIVE, INPUT, INTERNET, JUMPDRIVE, KEYBOARD, MEMORY, MONITOR, MONITOR, MOUSE, OUTPUT, PROCESS  
SERVER, SURF, TECHNOLGY, TYPING, WEB

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| Q | X | N | S | C | W | G | N | I | P | Y | T | K | N | W |
| F | U | D | O | G | P | H | U | R | Q | A | E | S | J | I |
| G | A | R | O | X | I | M | O | Z | C | Y | C | F | C | T |
| E | T | E | N | R | E | T | N | I | B | T | H | F | W | L |
| J | S | T | L | L | I | N | N | O | F | A | N | T | N | A |
| A | F | U | O | N | L | U | A | L | R | M | O | U | M | T |
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| E | G | M | Q | M | D | P | D | M | B | O | G | T | I | G |
| V | A | O | O | I | P | R | O | Y | E | F | Y | U | H | I |
| R | R | C | S | Y | I | R | D | O | W | N | L | O | A | D |
| E | Q | K | Y | V | Y | I | Y | F | U | B | J | C | G | C |
| S | H | D | E | O | P | R | O | C | E | S | S | U | R | F |